CLAIMS

1. A mail delivery system that receives an alias mail having an alias address different from a recipient address as a destination and replaces the destination with the recipient address to transfer the alias mail and receives a reply mail responding to the alias mail and replaces the recipient address with the alias address as a transmission source of the reply mail to transfer the reply mail, the mail delivery system comprising:

5

20

25

:

an alias mail processing unit that restores, when an alias mail having an alias address generated from the recipient address and a predetermined generation argument as a destination is received, the recipient address and the generation argument from the alias address, replaces the destination of the alias mail with the recipient address, and includes the generation argument in the alias mail to transfer to alias mail; and

a reply mail processing unit that acquires, when a reply mail responding to the alias mail transferred by the alias mail processing unit is received, the generation argument from the reply mail, regenerates the alias address from the generation argument and a recipient address indicating a transmission source of the reply mail, and replaces the transmission source of the reply mail with the alias address to transfer the reply mail.

The mail delivery system according to claim 1, wherein the alias mail processing unit includes:

a recipient address restoring unit that restores,

when the alias mail is received, the recipient address and
the generation argument from the alias address;

a reply destination address generating unit that generates a reply destination address including the

generation argument restored by the recipient address restoring unit and an originator address indicating a transmission source of the alias mail; and

an alias mail transfer unit that replaces the destination of the alias mail with the recipient address restored by the recipient address restoring unit and replaces the transmission source of the alias mail with the reply destination address generated by the reply destination address generating unit to transfer the alias mail, and

the reply mail processing unit includes:

5

10

15

20

25

:

an originator address restoring unit that restores, when the reply mail is received, the originator address and the generation argument from the reply destination address that is a destination of the reply mail:

an alias address regenerating unit that regenerates the alias address from the generation argument restored by the originator address restoring unit and the recipient address indicating the transmission source of the reply mail; and

a reply mail transfer unit that replaces the destination of the reply mail with the originator address restored by the originator address restoring unit and replaces the transmission source of the reply mail with the alias address regenerated by the alias address regenerating unit to transfer the reply mail.

3. The mail delivery system according to claim 2, wherein the generation argument is information indicating transfer conditions that the alias mail transferred to the recipient should satisfy,

the alias mail processing unit further includes a

transfer possibility judging unit that judges whether the alias mail satisfies transfer conditions restored by the recipient address restoring unit, and

the alias mail transfer unit transfers only an alias
mail that is judged by the transfer possibility judging
unit as satisfying the transfer conditions.

-

15

20

25

 The mail delivery system according to claim 3, wherein the transfer conditions are transfer conditions that
 can be updated according to transfer of the alias mail,

the alias mail processing unit further includes a transfer conditions updating unit that updates, when it is judged by the transfer possibility judging unit that the transfer conditions are satisfied, the transfer conditions to generate the generation argument anew, and

the reply destination address generating unit generates a reply destination address including the generation argument generated anew by the transfer conditions updating unit instead of the generation argument restored by the recipient address restoring unit.

5. The mail delivery system according to claim 3, wherein the transfer conditions are transfer conditions that can be updated according to reception of the alias mail,

the reply mail processing unit further includes a transfer conditions updating unit that updates the transfer conditions restored by the originator address restoring unit to generate the generation argument anew, and

the alias address regenerating unit regenerates an alias address including the generation argument generated anew by the transfer condition updating unit instead of the generation argument restored by the originator address restoring unit.

6. A mail transfer system that transfers a mail using a recipient alias address generated from a recipient address and a predetermined recipient generation argument and an originator alias address generated from an originator address and a predetermined originator generation argument, the mail transfer system comprising:

5

20

25

30

:

a first mail processing unit that restores, when a
mail having with a recipient reply destination address

generated from the recipient alias address and the
originator generation argument as a destination is received,
the recipient alias address and the originator generation
argument from the recipient reply destination address,
regenerates the originator alias address from the
originator generation argument and the originator address
indicating a transmission source of the mail, and replaces
the destination and the transmission source of the mail
with the recipient alias address and the originator alias
address to transfer the mail;

a second mail processing unit that restores, when a mail having the recipient alias address and the originator alias address as a destination and a transmission source is received, the recipient address and the recipient generation argument from the recipient alias address, generates an originator reply destination address from the recipient generation argument and the originator alias address, and replaces the destination and the transmission source of the mail with the recipient address and the originator reply destination address to transfer the mail;

a third mail processing unit that restores, when a reply mail having the originator reply destination address and the recipient address as a destination and a transmission source is received, the originator alias

address and the recipient generation argument from the originator reply destination address, regenerates the recipient alias address from the recipient generation argument and the recipient address, and replaces the destination and the transmission source of the mail with the originator alias address and the recipient alias address to transfer the mail; and

:

30

a fourth mail processing unit that restores, when a reply mail having the originator alias address and the recipient alias address as a destination and a transmission source is received, the originator address and the originator generation argument from the originator alias address, generates a recipient reply destination address from the originator generation argument and the recipient alias address, and replaces the destination and the transmission source of the mail with the originator address and the recipient reply destination address to transfer the mail.

7. The mail delivery system according to claim 6, wherein the recipient generation argument is information indicating transfer conditions that the mail transferred to the recipient should satisfy and the originator generation argument is information indicating transfer conditions that the mail transferred to the originator should satisfy,

the second mail processing unit judges whether the mails satisfy transfer conditions related to the recipient generation argument restored from the recipient alias address and transfers only a mail that satisfies the transfer conditions, and

the fourth mail processing unit judges whether the mails satisfy transfer conditions related to the originator generation argument restored from the originator alias

address and transfers only a mail that satisfies the transfer conditions.

5

10

15

:

8. A mail delivering method for receiving an alias mail having an alias address different from a recipient address as a destination and replacing the destination with the recipient address to transfer the alias mail, and for receiving a reply mail responding to the alias mail and replacing the recipient address with the alias address as a transmission source of the reply mail to transfer the reply mail, the mail deliverying method comprising:

an alias mail processing step for restoring, when an alias mail having an alias address generated from the recipient address and a predetermined generation argument as a destination is received, the recipient address and the generation argument from the alias address, replacing the destination of the alias mail with the recipient address, and including the generation argument in the alias mail to transfer to alias mail; and

- a reply mail processing step for acquiring, when a reply mail responding to the alias mail transferred by the alias mail processing unit is received, the generation argument from the reply mail, regenerating the alias address from the generation argument and a recipient address indicating a transmission source of the reply mail, and replacing the transmission source of the reply mail with the alias address to transfer the reply mail.
- The mail deliverying method according to claim 8,
 wherein

the alias mail processing step includes:

a recipient address restoring step for restoring, when the alias mail is received, the recipient address and

the generation argument from the alias address;

5

10

:

a reply destination address generating step for generating a reply destination address including the generation argument restored by the recipient address restoring unit and an originator address indicating a transmission source of the alias mail; and

an alias mail transferring step for replacing the destination of the alias mail with the recipient address restored by the recipient address restoring unit and replacing the transmission source of the alias mail with the reply destination address generated by the reply destination address generating step to transfer the alias mail, and

the reply mail processing step includes:

- an originator address restoring step for restoring, when the reply mail is received, the originator address and the generation argument from the reply destination address that is a destination of the reply mail;
- an alias address regenerating step for regenerating the alias address from the generation argument restored by the originator address restoring step and the recipient address indicating the transmission source of the reply mail; and
- a reply mail transferring step for replacing the destination of the reply mail with the originator address restored by the originator address restoring step and replacing the transmission source of the reply mail with the alias address regenerated by the alias address regenerating step to transfer the reply mail.
 - 10. The mail deliverying method according to claim 9, wherein

the generation argument is information indicating transfer conditions that the alias mail transferred to the recipient should satisfy,

the alias mail processing step further includes a transfer possibility judging unit that judges whether the alias mail satisfies transfer conditions restored by the recipient address restoring step, and

5

15

20

25

:

the alias mail transfer unit transfers only an alias mail that is judged by the transfer possibility judging step as satisfying the transfer conditions.

11. A mail transferring method for transferring a mail using a recipient alias address generated from a recipient address and a predetermined recipient generation argument and an originator alias address generated from an originator address and a predetermined originator generation argument, the mail transfer method comprising:

a first mail processing step for restoring, when a mail having with a recipient reply destination address generated from the recipient alias address and the originator generation argument as a destination is received, the recipient alias address and the originator generation argument from the recipient reply destination address, regenerating the originator alias address from the originator generation argument and the originator address indicating a transmission source of the mail, and replacing the destination and the transmission source of the mail with the recipient alias address and the originator alias address to transfer the mail;

a second mail processing step for restoring, when a mail having the recipient alias address and the originator alias address as a destination and a transmission source is received, the recipient address and the recipient

generation argument from the recipient alias address, generating an originator reply destination address from the recipient generation argument and the originator alias address, and replacing the destination and the transmission source of the mail with the recipient address and the originator reply destination address to transfer the mail;

5

20

25

:

a third mail processing step for restoring, when a reply mail having the originator reply destination address and the recipient address as a destination and a

10 transmission source is received, the originator alias address and the recipient generation argument from the originator reply destination address, regenerating the recipient alias address from the recipient generation argument and the recipient address, and replacing the

15 destination and the transmission source of the mail with the originator alias address and the recipient alias address to transfer the mail; and

a fourth mail processing step for restoring, when a reply mail having the originator alias address and the recipient alias address as a destination and a transmission source is received, the originator address and the originator generation argument from the originator alias address, generating a recipient reply destination address from the originator generation argument and the recipient alias address, and replacing the destination and the transmission source of the mail with the originator address and the recipient reply destination address to transfer the mail.

30 12. The mail delivering method according to claim 11, wherein

the recipient generation argument is information indicating transfer conditions that the mail transferred to

the recipient should satisfy and the originator generation argument is information indicating transfer conditions that the mail transferred to the originator should satisfy,

the second mail processing step judges whether the mails satisfy transfer conditions related to the recipient generation argument restored from the recipient alias address and transfers only a mail that satisfies the transfer conditions, and

5

25

30

-

the fourth mail processing step judges whether the

10 mails satisfy transfer conditions related to the originator
generation argument restored from the originator alias
address and transfers only a mail that satisfies the
transfer conditions.

13. A mail delivering program that causes a computer to receive an alias mail having an alias address different from a recipient address as a destination and replace the destination with the recipient address to transfer the alias mail, and to receive a reply mail responding to the alias mail and replace the recipient address with the alias address as a transmission source of the reply mail to transfer the reply mail, the mail deliverying program comprising:

an alias mail processing procedure for restoring, when an alias mail having an alias address generated from the recipient address and a predetermined generation argument as a destination is received, the recipient address and the generation argument from the alias address, replacing the destination of the alias mail with the recipient address, and including the generation argument in the alias mail to transfer to alias mail; and

a reply mail processing procedure for acquiring, when a reply mail responding to the alias mail transferred by

the alias mail processing unit is received, the generation argument from the reply mail, regenerating the alias address from the generation argument and a recipient address indicating a transmission source of the reply mail, and replacing the transmission source of the reply mail with the alias address to transfer the reply mail.

- 14. The mail delivering program according to claim 13, wherein
- 10 the alias mail processing procedure includes:
 - a recipient address restoring procedure for restoring, when the alias mail is received, the recipient address and the generation argument from the alias address;
- a reply destination address generating procedure

 15 for generating a reply destination address including the
 generation argument restored by the recipient address
 restoring unit and an originator address indicating a
 transmission source of the alias mail; and
- an alias mail transferring procedure for

 replacing the destination of the alias mail with the
 recipient address restored by the recipient address
 restoring unit and replacing the transmission source of the
 alias mail with the reply destination address generated by
 the reply destination address generating procedure to

 transfer the alias mail, and

the reply mail processing procedure includes:

30

an originator address restoring procedure for restoring, when the reply mail is received, the originator address and the generation argument from the reply destination address that is a destination of the reply mail;

an alias address regenerating procedure for regenerating the alias address from the generation argument

restored by the originator address restoring procedure and the recipient address indicating the transmission source of the reply mail; and

a reply mail transferring procedure for replacing the destination of the reply mail with the originator address restored by the originator address restoring unit and replacing the transmission source of the reply mail with the alias address regenerated by the alias address regenerating unit to transfer the reply mail.

10

15

5

15. The mail delivering program according to claim 14, wherein

the generation argument is information indicating transfer conditions that the alias mail transferred to the recipient should satisfy,

the alias mail processing procedure further includes a transfer possibility judging unit that judges whether the alias mail satisfies transfer conditions restored by the recipient address restoring unit, and

the alias mail transferring procedure transfers only an alias mail that is judged by the transfer possibility judging unit as satisfying the transfer conditions.

16. A mail transferring program that causes a computer to transfer a mail using a recipient alias address generated from a recipient address and a predetermined recipient generation argument and an originator alias address generated from an originator address and a predetermined originator generation argument, the mail transfer system comprising:

a first mail processing procedure for restoring, when a mail having with a recipient reply destination address generated from the recipient alias address and the

originator generation argument as a destination is received, the recipient alias address and the originator generation argument from the recipient reply destination address, regenerating the originator alias address from the originator generation argument and the originator address indicating a transmission source of the mail, and replacing the destination and the transmission source of the mail with the recipient alias address and the originator alias address to transfer the mail;

5

25

30

a second mail processing procedure for restoring, when a mail having the recipient alias address and the originator alias address as a destination and a transmission source is received, the recipient address and the recipient generation argument from the recipient alias address, generating an originator reply destination address from the recipient generation argument and the originator alias address, and replacing the destination and the transmission source of the mail with the recipient address and the originator reply destination address to transfer the mail:

a third mail processing procedure for restoring, when a reply mail having the originator reply destination address and the recipient address as a destination and a transmission source is received, the originator alias address and the recipient generation argument from the originator reply destination address, regenerating the recipient alias address from the recipient generation argument and the recipient address, and replacing the destination and the transmission source of the mail with the originator alias address and the recipient alias address to transfer the mail; and

a fourth mail processing procedure for restoring, when a reply mail having the originator alias address and the

recipient alias address as a destination and a transmission source is received, the originator address and the originator generation argument from the originator alias address, generating a recipient reply destination address from the originator generation argument and the recipient alias address, and replacing the destination and the transmission source of the mail with the originator address and the recipient reply destination address to transfer the mail.

10

15

20

25

5

17. The mail delivering program according to claim 16, wherein

the recipient generation argument is information indicating transfer conditions that the mail transferred to the recipient should satisfy and the originator generation argument is information indicating transfer conditions that the mail transferred to the originator should satisfy,

the second mail processing procedure judges whether the mails satisfy transfer conditions related to the recipient generation argument restored from the recipient alias address and transfers only a mail that satisfies the transfer conditions, and

the fourth mail processing procedure judges whether the mails satisfy transfer conditions related to the originator generation argument restored from the originator alias address and transfers only a mail that satisfies the transfer conditions.